



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

July 18, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:28 Reporting for the week ending 07/12/14 (MMWR Week #28)

CURRENT HOMELAND SECURITY THREAT LEVELS

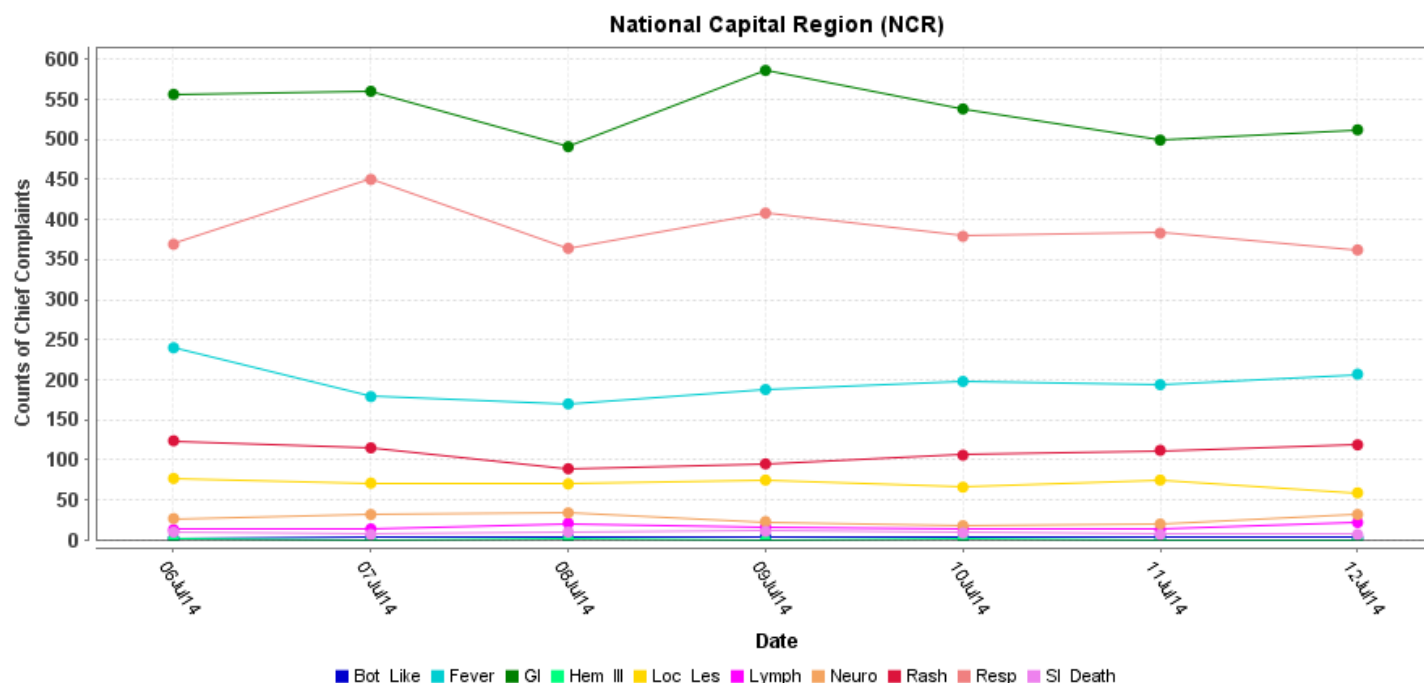
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

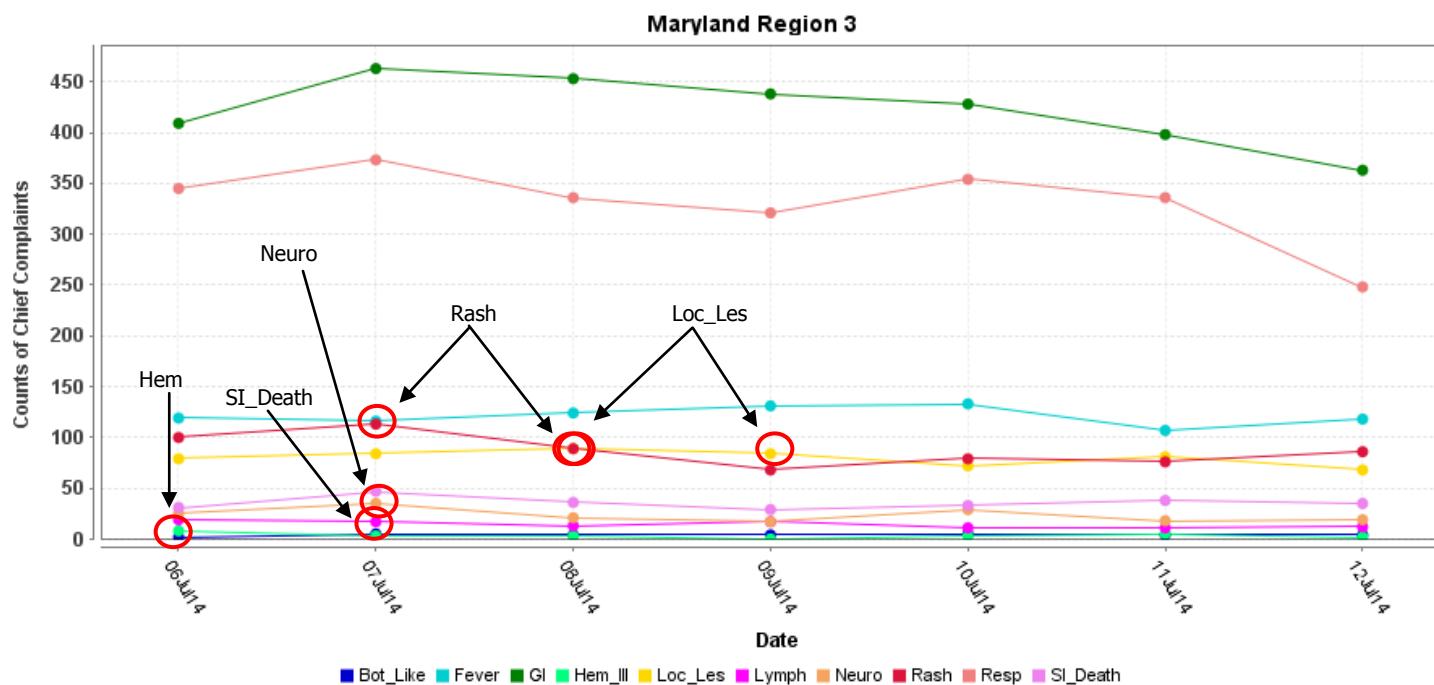
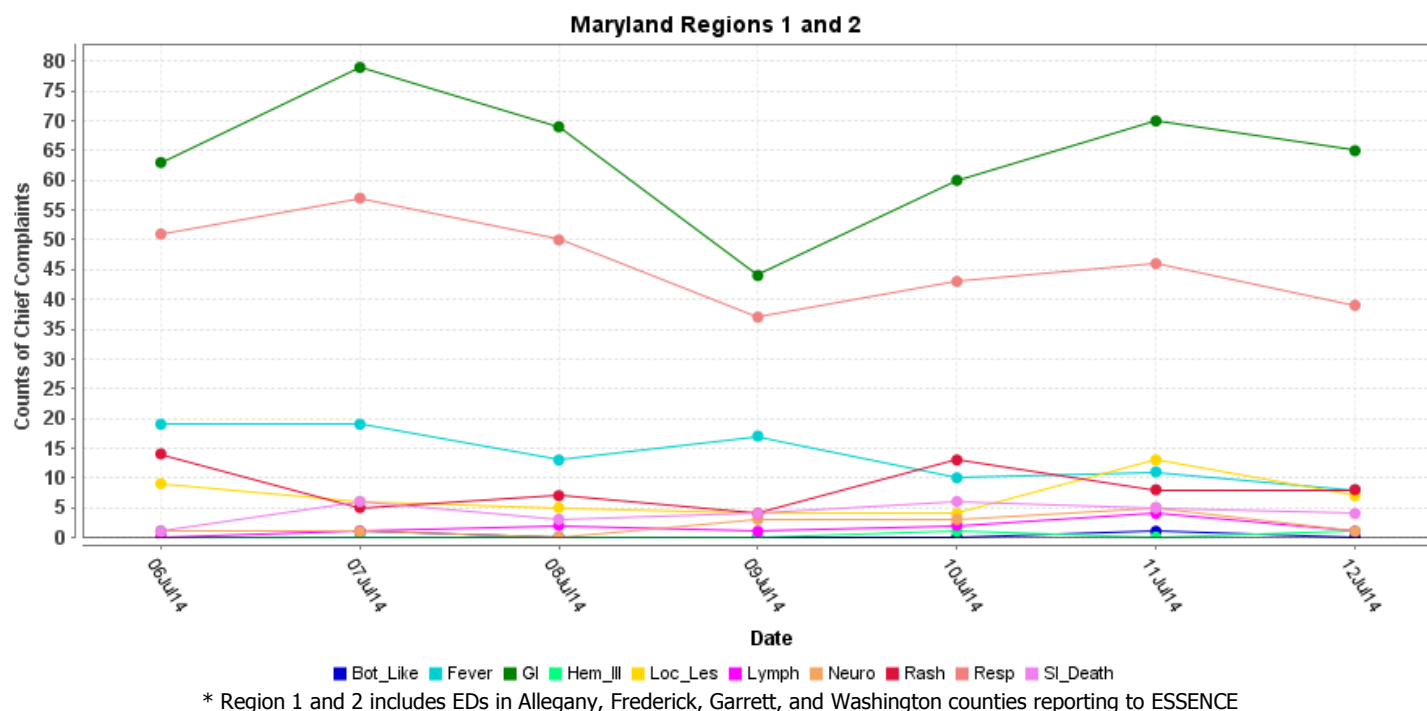
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

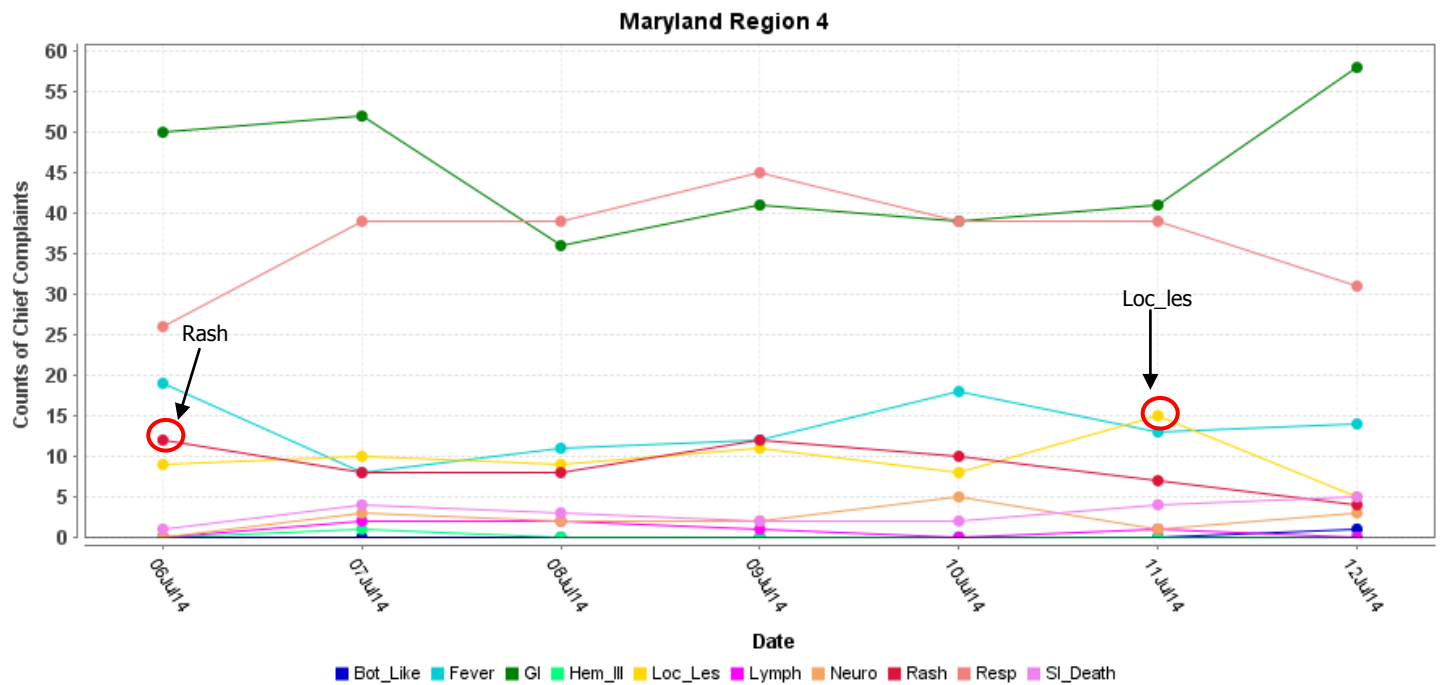
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



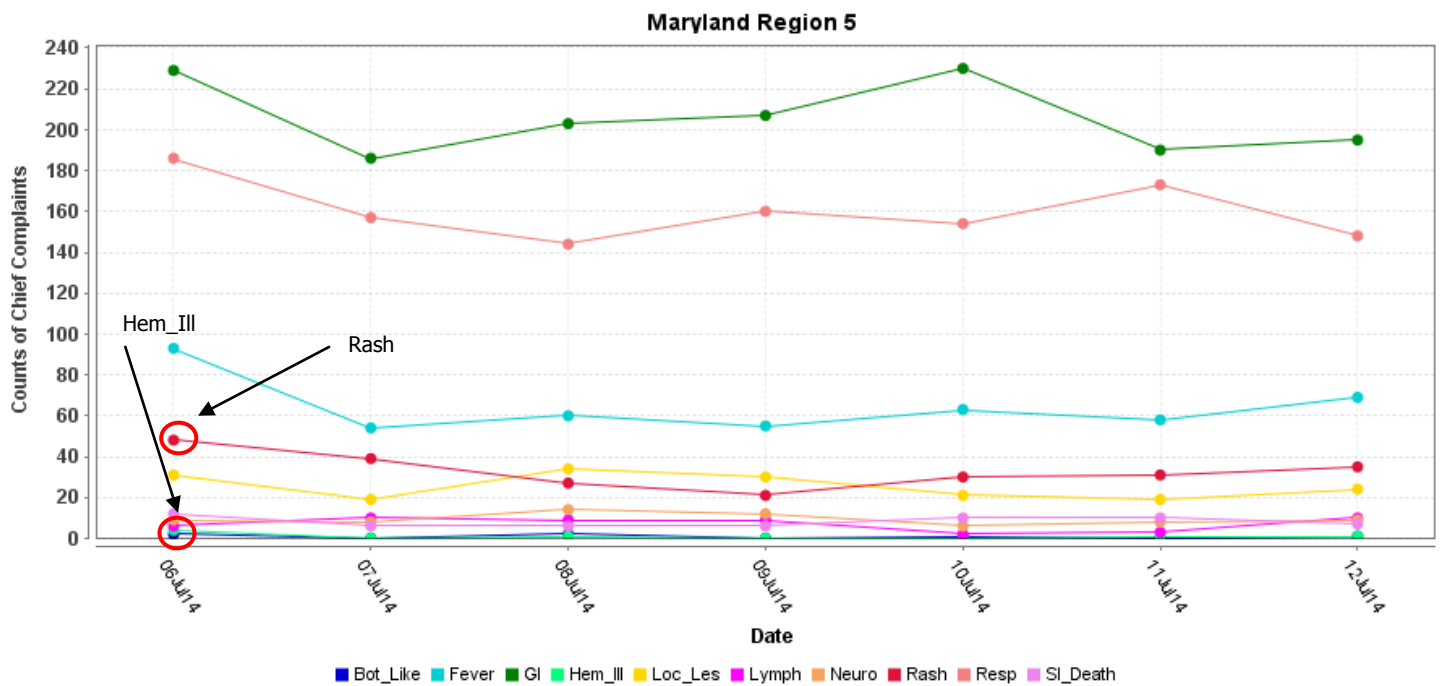
*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

MARYLAND ESSENCE:





* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

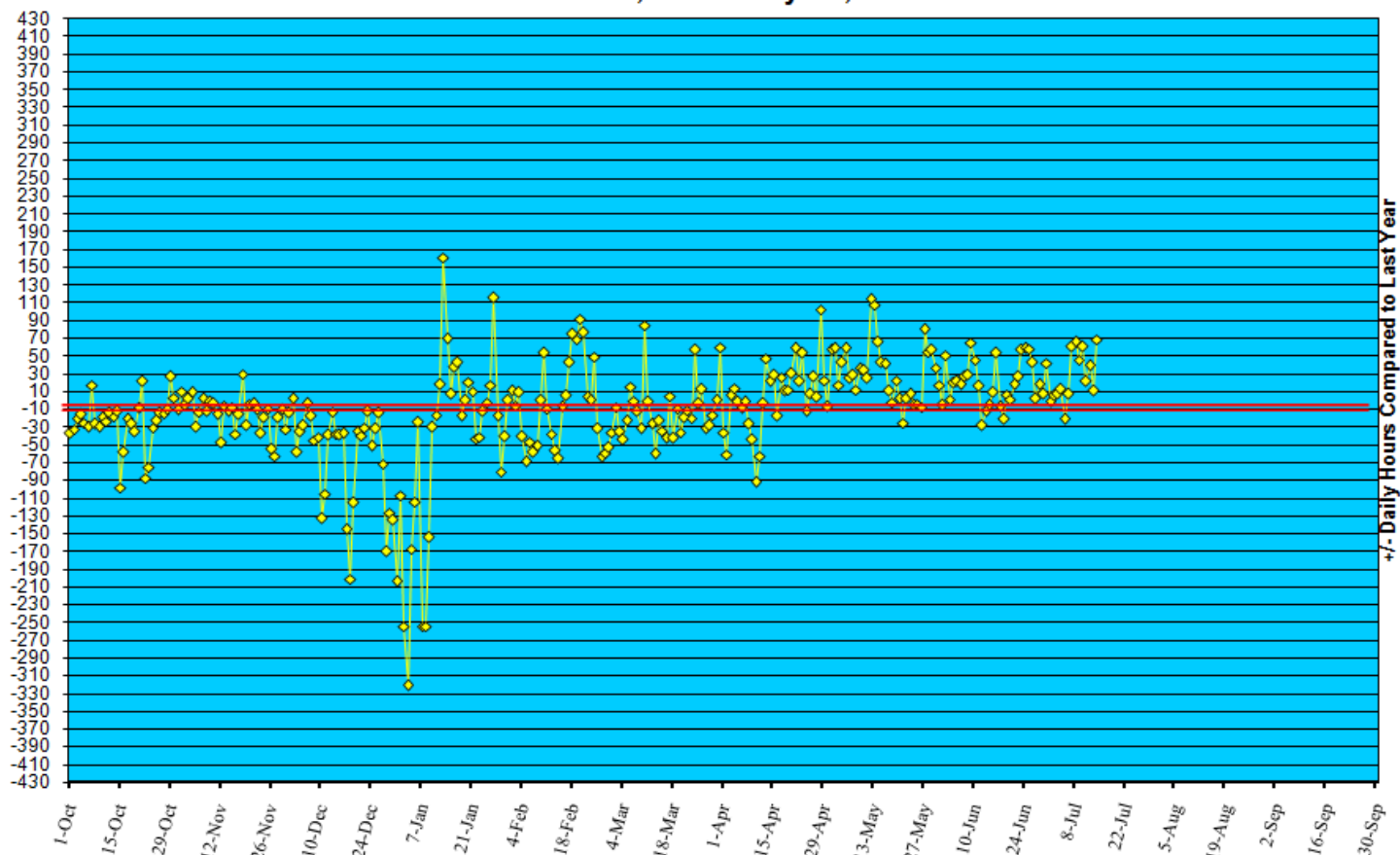


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to July 12, '14



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (July 6 - July 12, 2014):	4	0
Prior week (June 29 - July 5, 2014):	13	0
Week#28, 2013 (July 7 - July 13, 2013):	3	0

5 outbreaks were reported to DHMH during MMWR week 28 (July 6-12, 2014).

4 Rash illness outbreaks

3 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers

1 outbreak of RASH ILLNESS associated with a Boat

1 Foodborne outbreak

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

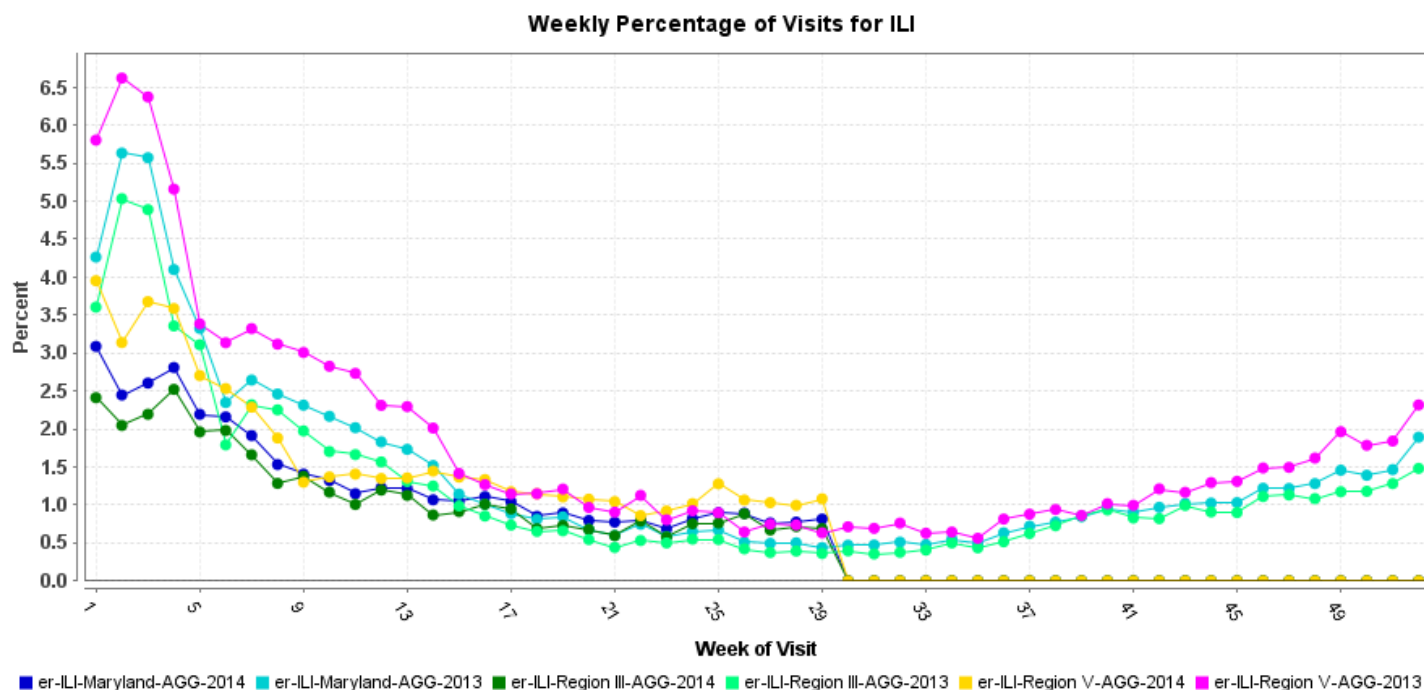
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

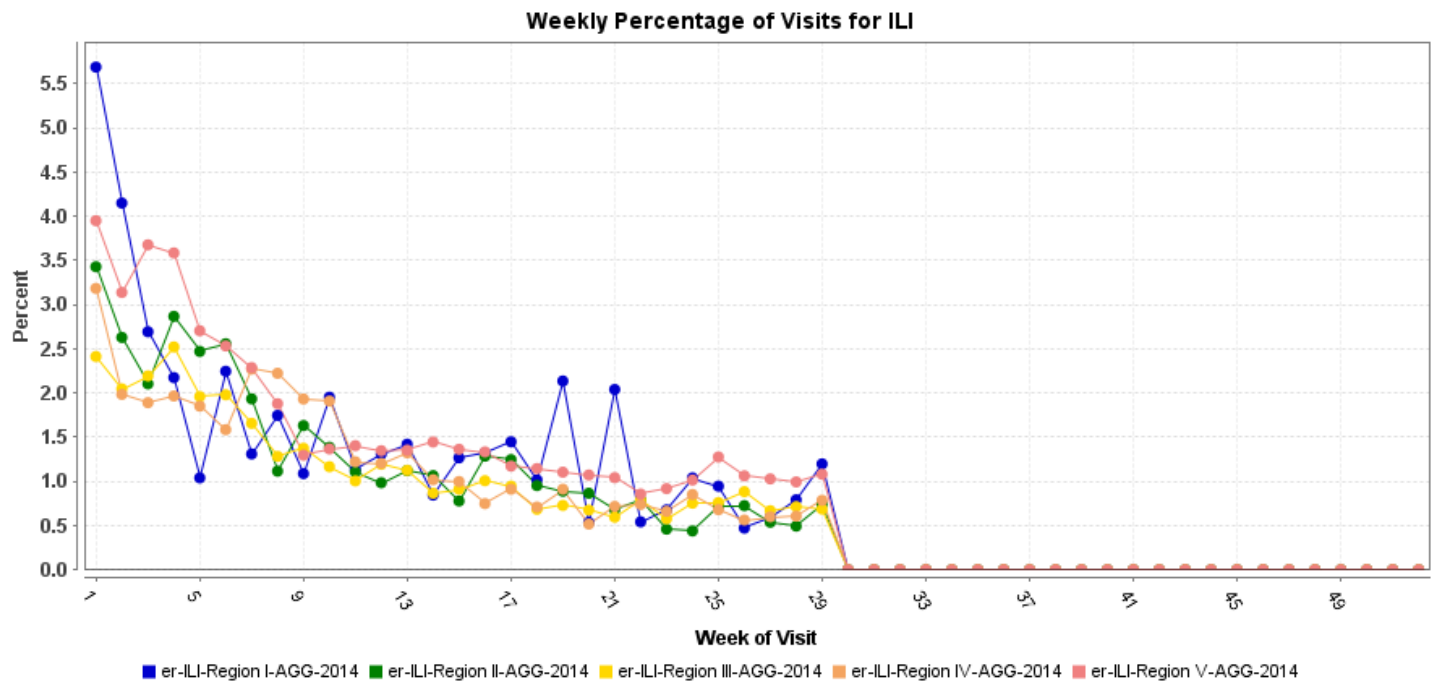
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



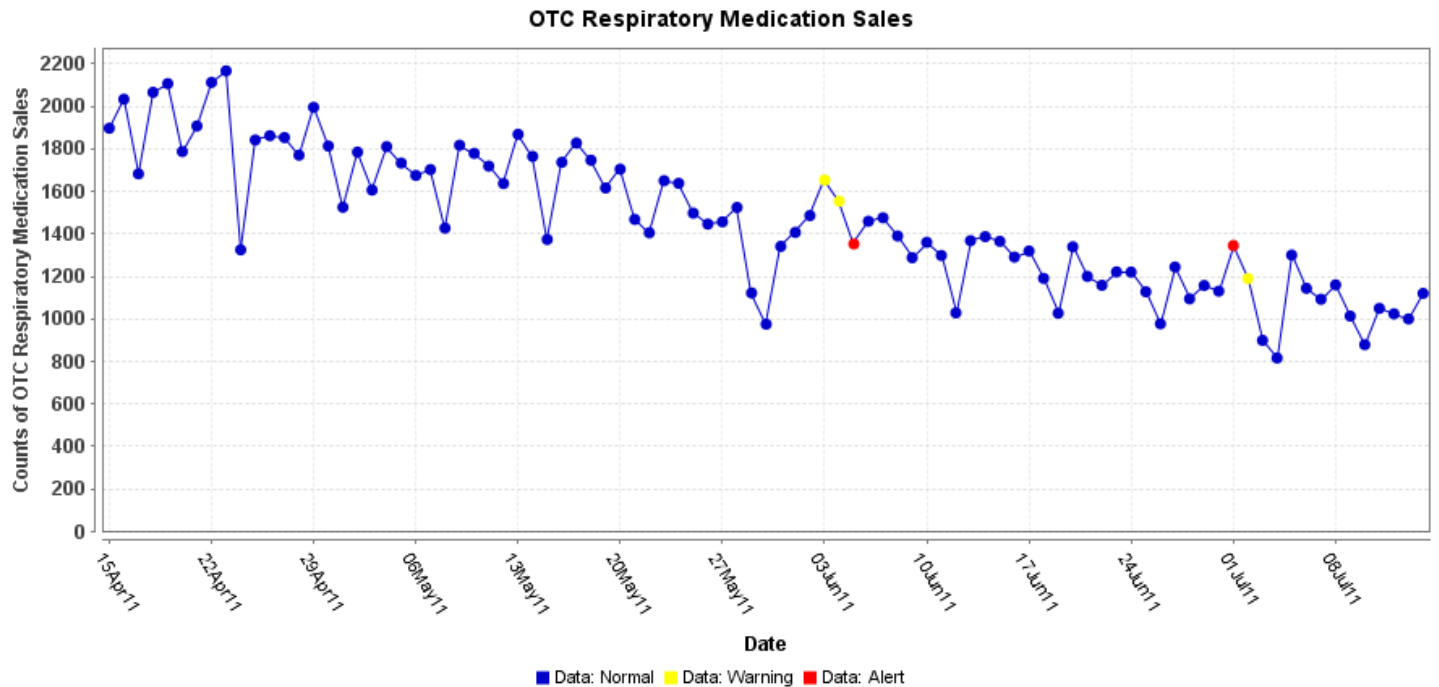
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

HANTAVIRUS (TEXAS): 08 Jul 2014, Two recent cases of hantavirus pulmonary syndrome [HPS] were confirmed in residents of the Texas Panhandle and South Plains [both areas of northwest Texas], bringing the year's [2014] total to 3. Texas had one case in 2013. No cases were reported from 2009 to 2012. The disease is severe and sometimes fatal, prompting the Texas Department of State Health Services [DSHS] to remind people to protect themselves from the virus that causes HPS. A case confirmed earlier this year [2014] was a resident of the Panhandle. Hantavirus[es are] carried by certain species of rats and mice that shed the virus in their urine, droppings and saliva. The virus is transmitted to people when nesting materials or dust contaminated by infected rat or mouse urine, droppings and saliva are stirred up, allowing the virus to be breathed in by humans. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

PLAGUE (COLORADO): 09 Jul 2014, The Colorado Department of Public Health and Environment laboratory yesterday [8 Jul 2014] identified pneumonic plague in a Colorado resident. Investigation revealed the family dog had recently died unexpectedly. The carcass was recovered and tested at the Colorado State University Veterinarian Diagnostic Laboratory, where tests were positive for plague. Tri-County Health Department officials and the Colorado Department of Public Health and Environment are working together to investigate the source of exposure and to identify those who may have been exposed through close contact with the individual. Any individuals exposed will be recommended for antibiotic treatment. The patient and the dog may have been exposed in eastern Adams County. Plague is spread from fleas on rodents, most commonly prairie dogs. People walking in open spaces and trails should avoid contact with rodents. (Plague is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

TULAREMIA (NEW MEXICO): 10 Jul 2014, The New Mexico Department of Health announced today [10 Jul 2014] a laboratory confirmed case of tularemia in a 65-year-old woman from Bernalillo County. The cause of the woman's illness was confirmed at the Department's Scientific Laboratory Division. The woman was hospitalized but has recovered and gone home. "We will be following up with a case investigation later this week in an effort to prevent future infections," says Dr. Paul Smith, Urban Biology Division manager for the City of Albuquerque's Environmental Health Department. There have also been 7 pet cases of tularemia in 2014, 4 dogs and 3 cats from Santa Fe, Bernalillo, and Los Alamos counties. (Tularemia is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

HANTAVIRUS (ARGENTINA): 06 July 2014, A 27-year-old woman from Mendieta died, infected by a hantavirus in Jujuy province, according to a statement issued by the Provincial Ministry of Health. With the hospital admission of the young woman, municipal workers from the Health Office carried out relevant control [activities] in the area around the home of the infected woman. The Ministry of Health stated that so far this year [2014], 98 suspected cases of hantavirus [pulmonary syndrome] have been registered throughout entire province. Given this [case], the community was reminded about the necessity of keeping houses clean in order to avoid contracting the disease, which is fatal and is transmitted by rodents that enter the house to escape the cold. It was also stated that one could become infected without the rodents being present through exposure to [virus contaminated] urine and feces. Symptoms of this disease are similar to flu, which may make its recognition difficult, given that the symptoms are composed of muscle pain, fever, migraine headache, cough, nausea or vomiting, diarrhea and abdominal pain. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (HUNGARY): 08 Jul 2014, An infection of deadly anthrax has been identified in beef in Heves county in eastern Hungary, and one person showing symptoms is receiving medical treatment, the veterinary authority NEBIH said in a statement on its website late on Monday [7 Jul 2014]. It said the disease was identified in a cow slaughtered in a home. Last week [week ending 6 Jul 2014] anthrax was identified in frozen beef in a different part of Hungary after 2 cattle were slaughtered illegally on a farm. NEBIH said the 2 cases were not related. It said animals are infected via feedstock, such as by grazing in contaminated fields. The anthrax bacteria can spread after floods or during longer periods of drought when wells become contaminated, the authority said. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

TYPHOID FEVER (NEPAL): 08 Jul 2014, The number of people suffering from [typhoid fever] is on the rise in the district [Saptari], with the rise in temperature and rainfall. The Gajendra Narayan Singh Hospital in Rajbiraj has been receiving an increasing number of people coming with complaints of viral fever and typhoid, according to Ram Kumar Diyali of the Emergency Ward of the hospital. Every day more than 40 persons suffering from typhoid and viral fever are coming to the hospital, compared to 3 to 4 persons 2 weeks ago, Diyali said. Quick change in weather and failure to observe alertness in food habits have increased the spread of viral fever and typhoid, doctors said. "We are now suffering lack of beds as the hospital is receiving such patients from Siraha [and] Udayapur districts as well, including from neighboring village in India," said Medical Superintendent Dr Saileksh Jha. (*Salmonella* species are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (PAKISTAN): 09 Jul 2014, At least 900 people have arrived in PIMS hospital (Pakistan Institute of Medical Sciences) complaining of cholera and diarrhea. Since the holy month of Ramadan has started, more than 900 patients affected by cholera, gastroenteritis and digestion problems have come to PIMS hospital. Over 600 children have been admitted to hospital due to dehydration and stomach problems. According to doctors, precautionary measures are necessary to follow during Iftar and Sehri times; intake of water needs to be increased during Sehri and Iftar times, and Samosas and Pakoras made in Bazaars should be avoided, as they are fried in substandard oil. (Water safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Suspect cases

E COLI (ENGLAND): 09 Jul 2014, Two children have been hospitalized and a number of others affected by a suspected E. coli outbreak at a nursery in Northwich. Environmental Health officers are investigating a cluster of probable E. coli O157 cases after 2 children from Chrysalis Day Nursery had to receive treatment at Leighton Hospital due to "complications." 14 probable cases have since been reported following screening of all staff and youngsters, with both children and family members showing symptoms of the infection, prompting the nursery to ask parents to keep their children at home as a precaution. Five of the cases are a result of secondary transmission to other family members. Dr Richard Jarvis from Cheshire and Merseyside's PHE team said: "Investigations are still ongoing and all public health measures have been put in place to help prevent further cases. Staff and nursery children in the 3 affected classes are being screened, and parents have been asked to keep their children at home until they have produced 2 clear specimens. This is a precautionary approach and in line with national guidelines." The condition of the children in hospital is not yet known. (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	<p>ACUTE condition that may represent exposure to botulinum toxin</p> <p>ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy.</p> <p>ACUTE descending motor paralysis (including muscles of respiration)</p> <p>ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.</p>	Botulism
Hemorrhagic Illness	<p>SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola</p> <p>ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF</p> <p>ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria</p>	VHF
Lymphadenitis	<p>ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)</p>	Plague (Bubonic)
Localized Cutaneous Lesion	<p>SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia</p> <p>ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia</p> <p>INCLUDES insect bites</p> <p>EXCLUDES any lesion disseminated over the body or generalized rash</p> <p>EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease</p>	Anthrax (cutaneous) Tularemia
Gastrointestinal	<p>ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract</p> <p>SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis</p> <p>ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea</p> <p>EXCLUDES any chronic conditions such as inflammatory bowel syndrome</p>	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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CENTERS FOR DISEASE CONTROL AND PREVENTION**

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